

**PRACTICE EXERCISES**

Find the replacement set. Then solve and check.

1.  $\frac{1}{5x} = \frac{1}{10}$
2.  $\frac{1}{7y} = \frac{1}{21}$
3.  $\frac{x}{4} + \frac{x}{5} = 9$
4.  $\frac{x}{5} + \frac{x}{3} = 16$
5.  $\frac{x}{3} + \frac{1}{6} = \frac{x}{4} + \frac{1}{4}$
6.  $\frac{2y}{9} - \frac{5}{6} = \frac{y}{9} - \frac{1}{2}$
7.  $\frac{x}{3} + \frac{x}{2} = 5$
8.  $\frac{y}{5} + \frac{y}{2} = 7$
9.  $\frac{x}{4} - 1 = \frac{x}{8}$
10.  $\frac{x-4}{6} = \frac{x-4}{2}$
11.  $\frac{y+4}{5} = \frac{y-2}{3}$
12.  $\frac{10}{6x+7} = \frac{6}{2x+9}$
13.  $\frac{4}{y-3} = \frac{6}{y+3}$
14.  $\frac{2x}{3} - \frac{1}{2} = \frac{2x+5}{6}$
15.  $\frac{3x-2}{12} - \frac{1}{6} = \frac{1}{6}$
16.  $\frac{-6}{2-4x} = \frac{10}{6x-8}$
17.  $\frac{2}{3x-5} = \frac{4}{x-15}$
18.  $\frac{1}{x+12} = \frac{3x}{3x^2+36}$
19.  $\frac{7y}{y^2-4} + \frac{5}{y-2} = \frac{2y}{y^2-4}$
20.  $\frac{4x}{x^2-16} + \frac{5}{x+4} = \frac{5x}{x^2-16}$
21.  $\frac{7x-2}{11} - 1 = \frac{2x-7}{3}$
22.  $\frac{3x-6}{x} + 1 = \frac{10}{x} + \frac{4}{x}$
23.  $2 - \frac{1}{x+1} = \frac{x}{x+1}$
24.  $3 + \frac{4}{y-4} = \frac{y}{y-4}$
25.  $\frac{5}{x^2-7x+12} - \frac{2}{3-x} = \frac{5}{x-4}$
26.  $\frac{3}{x+5} + \frac{2}{5-x} = \frac{-4}{x^2-25}$
27.  $\frac{8}{x^2-x} + \frac{8}{x} = \frac{6}{2x-2}$
28.  $\frac{5}{x+2} = \frac{-1}{x^2+7x+10} + \frac{3}{-x-5}$
29.  $\frac{7x+3}{x^2-8x+15} + \frac{3x}{x-5} = \frac{-1}{x-3}$
30.  $\frac{10}{2y+8} - \frac{7y+8}{y^2-16} = \frac{-8}{2y-8}$
31.  $\frac{x-5}{x^2-4x-5} - \frac{2x-5}{x^2-x-2} = 0$
32.  $\frac{x+4}{x^2+4x} - \frac{x}{x^2+6x} = 0$
33.  $\frac{2}{x+3} - \frac{3}{4-x} = \frac{2x-2}{x^2-x-12}$
34.  $\frac{4}{x+4} = \frac{-5}{x^2-16} + 1$